

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB2004/052778

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01L27/146 H01L27/15 H01L21/329 H01L21/336 H01L21/84
G09G3/32

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01L G09G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 862 237 A (MOROZUMI ET AL) 29 August 1989 (1989-08-29) column 5, line 1 - column 7, line 15 column 6, line 15 - line 18 column 6, line 29 - line 30 column 6, line 38 - line 41 figure 5 figure 14	1,2,5,6, 10,11
X	US 5 262 649 A (ANTONUK ET AL) 16 November 1993 (1993-11-16) column 7, line 55 - column 9, line 39 column 8, line 13 - line 16 figure 1	1,5,11
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

14 June 2005

Date of mailing of the international search report

23/06/2005

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 634 800 A (PHILIPS ELECTRONICS UK LIMITED; PHILIPS ELECTRONICS N.V) 18 January 1995 (1995-01-18) column 6, line 46 - column 12, line 19 figure 1	1,5,11
A	----- US 2001/052597 A1 (YOUNG NIGEL D ET AL) 20 December 2001 (2001-12-20) the whole document figures 2-4	1-11
A	----- US 5 589 694 A (TAKAYAMA ET AL) 31 December 1996 (1996-12-31) the whole document -----	1-11

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB2004/052778

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 4862237	A	29-08-1989	JP	59126666 A		21-07-1984
			JP	60064467 A		13-04-1985
			JP	3135524 A		10-06-1991
			JP	3135525 A		10-06-1991
US 5262649	A	16-11-1993	US	5079426 A		07-01-1992
			AT	191977 T		15-05-2000
			CA	2127453 A1		22-07-1993
			DE	69328447 D1		25-05-2000
			DE	69328447 T2		21-12-2000
			EP	0724729 A1		07-08-1996
			JP	7502865 T		23-03-1995
			WO	9314418 A1		22-07-1993
			CA	2065246 A1		07-03-1991
			EP	1167999 A1		02-01-2002
			EP	0490997 A1		24-06-1992
			JP	3050402 B2		12-06-2000
			JP	5503770 T		17-06-1993
			WO	9103745 A1		21-03-1991
EP 0634800	A	18-01-1995	DE	69401685 D1		20-03-1997
			DE	69401685 T2		24-07-1997
			EP	0634800 A1		18-01-1995
			JP	7078954 A		20-03-1995
			US	5451766 A		19-09-1995
US 2001052597	A1	20-12-2001	WO	0199191 A1		27-12-2001
			EP	1222691 A1		17-07-2002
			JP	2003536115 T		02-12-2003
US 5589694	A	31-12-1996	JP	3347803 B2		20-11-2002
			JP	6275805 A		30-09-1994
			JP	3347804 B2		20-11-2002
			JP	6275806 A		30-09-1994
			JP	3402380 B2		06-05-2003
			JP	6275807 A		30-09-1994
			JP	3329512 B2		30-09-2002
			JP	6275808 A		30-09-1994
			JP	3403994 B2		06-05-2003
			JP	2000299454 A		24-10-2000
			US	5501989 A		26-03-1996
			US	5744822 A		28-04-1998
			JP	3405955 B2		12-05-2003
			JP	2000294798 A		20-10-2000